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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,247	07/31/2001	Peter Stricker	D-1548	4044

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EXAMINER

PHAM, LEDA T

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,247

Applicant(s)

STRICKER, PETER

Examiner

Leda T. Pham

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2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because legal phraseology "consists" is using.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 recites the limitation "modifying a slip characteristic" in line 1. There is insufficient antecedent basis for this limitation in the claim. How is "modifying a slip characteristic" in the generator. In light of the spec. the subject matter recited "modifying a slip characteristic" is understood as "increasing the rotor resistance".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1- 2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson et al. (U.S. Patent No. 5,083,039).

Richardson teaches “for using an electric power-generating device that converts fluid flow of wind or water to electricity including a rotor having blades that rotate in response to fluid flow; a main power input shaft coupled to said rotor; a single-stage torque-dividing gearbox coupled to said main power input shaft; said torque-dividing gearbox having a plurality of output shafts located around a perimeter of said main power input shaft; and, a plurality of sub-powertrains, each one of said sub-powertrains including a generator coupled to a respective one of said output shafts” (read as a preamble of the claim) a controller (38, 40) method regulating torque experienced by each generator (16, 18) to assure that torques are balanced between generators (figure 1 and figure 2, lines 34 – 38 column 5). Column 2, lines 1 – 5 and lines 10 – 13, inherently, when the generator controllers control the torque of each generator to reach a desired torque, the torques are balanced between generators.

Regarding to claim 2, Richardson teach the regulating torque step controlling local voltage at each generator (16, 18) by a transformer (36) configured as a reactor, in which coils of transformers are wired in parallel and are actively modulated with an SCR, solid-state, switching device (lines 28 – 36, column 6).

Regarding to claim 6, Richardson teaches a system of mechanically coupled multiple induction generators driven by a single rotor, a method of regulating torque experienced by each induction generator to assure that torques are balanced between generators at any system load comprising steps of monitoring torque on each individual generator (figure 1, lines 34 –

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38 column 5); determining relative torque balance between said multiple generators, and modifying torque characteristics of said individual generators to bring said generators into balance to provide uniform torque load distribution between said multiple generators (column 2, lines 1 – 5 and lines 10 – 13).

7. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lateur et al. (U.S. Patent No. 5,823,280).

Lateur teaches “for using an electric power-generating device that converts fluid flow of wind or water to electricity including a rotor having blades that rotate in response to fluid flow; a main power input shaft coupled to said rotor; a single-stage torque-dividing gearbox coupled to said main power input shaft; said torque-dividing gearbox having a plurality of output shafts located around a perimeter of said main power input shaft; and, a plurality of sub-powertrains, each one of said sub-powertrains including a generator coupled to a respective one of said output shafts” (read as a preamble of the claim) a controller method in figure 1 (microprocessor, power controller) regulating torque experienced by each generator (12, 14) to assure that torques are balanced between generators (line 41 – 52, column 7).

Regarding to claim 6, Lateur teaches a system of mechanically coupled multiple induction generators driven by a single rotor, a method of regulating torque experienced by each induction generator to assure that torques are balanced between generators at any system load comprising steps of monitoring torque on each individual generator; determining relative torque balance between said multiple generators and, modifying torque characteristics of said individual generators to bring said generators into balance to provide uniform torque load distribution between said multiple generators (line 41 – 52, column 7).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson as applied to claim 1 above, and further in view of Crewson et al. (U.S. Patent No. 5,905,646).

Richardson substantially discloses the claimed invention, except for the added limitations of the generator connecting to a respective primary coil of a transformer and a respective secondary coil is connected to an SCR.

However, Crewson teaches in figure 6 and figure 7 the generator (51) is connected to a respective primary coil (54) of a transformer (55) and a respective secondary coil (56) is connected to an SCR (57) to assure each current flow through the SCR.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the primary coil and secondary coil as taught by Crewson. Doing so would assure each current flow through the SCR.

10. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson as applied to claim 1 above, and further in view of Herderson (U.S. Patent No. 5,140,170).

Richardson substantially discloses the claimed invention, except for the added limitations of modifying a slip characteristic of each generator to match the generator with the greatest slip.

Herderson teaches modifying the slip if each generator in the system to equal the greatest slip (see abstract) to balance the rpm in each rotor in generator.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the slip in each generator as taught by Herderson. Doing so would provide balancing in the rpm of each rotor in generator.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Richardson and Herderson as applied to claim 4 above, and further in view of Law (U.S. Patent No. 4,636,707).

The combination of Richardson and Herderson refs substantially discloses the claimed invention, except for the added limitations of increasing the rotor resistance.

Law teaches a step increasing the rotor resistance to have the effect of increasing the slip characteristic of each generator (lines 13 – 19 column 3).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the rotor resistance as taught by Law to have the effect of increasing the slip characteristic of each generator.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leda T. Pham whose telephone number is (703) 305-4864. The examiner can normally be reached on M-F (7:30-5:00) first Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the


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organization where this application or proceeding is assigned are (703) 746-9176 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

Leda T. Pham
Examiner
Art Unit 2834

LTP
October 1, 2002



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